

best in class sports lighting

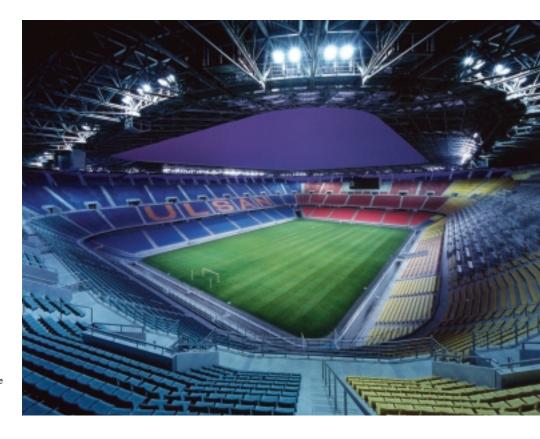
Combining stylish, compact design with high-precision engineering. Arena Vision is the best-in-class system for sports lighting.

Sports, the world's largest entertainment industry, cover not only professional users but those who use it for recreation as well. This is one of the reasons why Philips has sports lighting concepts dedicated to both dimensions. Thanks to TV coverage, sport captures the attention of almost everyone. That is why lighting plays such an important role, not only to ensure players are performing at their best, but also ensures spectator participation and satisfaction.

Based on Philips' long experience as the world's No.1 sports lighting supplier, the New ArenaVision

enjoys improvements in every aspect, including design, compactness, optics, power, efficiency, beam-spread, control, ease of installation, reliability and flexibility. This makes it the optimum choice for today's high standard sports lighting which demands brilliant lighting level as well as superior color temperature and rendering.

The ArenaVision range of two projectors, the MVF401 & 403, with a variety of reflectors and lamps, offers you a choice of nine different optical systems and three levels of power output for all possible uses; both indoors and outdoors.



ArenaVision provided spectators and television viewers of the World Cup Stadium in Korea with the very highest standard of lighting needed to ensure the enjoyment of an epic football event.

Pioneered by Philips, the innovative design

philosophy uses oval design facetted mirrors.

It has produced a balanced range of optics to

award-winning design

Unique to New ArenaVision is the patented, award-winning oval shape of the floodlight and the oval reflector inside it.

A precisely engineered oval reflector provides maximum light gathering capacity with minimal surface area, thus delivering improved output across a balanced range of optics for all lighting requirements.

The oval shape and design of the cast-aluminum housing also produces less windage and drag compared to conventional floodlights. Architects can use slimmer masts, elegant mounting systems

for better architectural integration and imaginative design strategies in any structure or stadium.

The cast-aluminium housing gives the New ArenaVision floodlights a higher quality finish and tighter construction that virtually eliminates ingress of dust and water. Every element of the design, from lamps to optics to gear, works with the others to improve total lighting performance.

optimum visibility

ArenaVision 403 comes equipped with the Philips

MHN-SA 2000W metal halide lamp (the first at this

rating developed specifically for colour TV), providing up

to 15% more light output with no change in the original

ArenaVision natural colour rendering.

This means more brilliant and dramatic lighting than ever before. With its superior daylight colour temperature of 5,600 Kelvin and top colour rendering index of Ra90, you get perfect broadcasting conditions for High Definition TV, sharp super-slow motion and brilliant colour photography.

ArenaVision 401 equipped with a 1000W lamp (MHN-LA 1000W) is also available with exactly the same colour brilliance characteristics as the 403.





ArenaVision makes light at night look better than daylight.



The Orchid Country Club's golf course in Singapore needed a choice of beam spreads to combine output uniformity with aesthetic diversity. ArenaVision provided the answer.

increased reliability

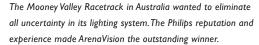
As a total lighting solution provider, Philips offers all relevant technologies from lamp to gear and from gear to floodlight, so that everything works in synergy.

That's your assurance that everything will operate perfectly – now and for many years to come.

The ArenaVision housing is cast from aluminum by high pressure. In combination with a chemically toughened front glass protected by a stainless steel grill, the new ArenaVision is designed to resist the worst weather conditions. It comes with an IP65 rating, making it totally impervious to dust and high-pressure water jet. ArenaVision's optional hot re-strike capability is insurance against any electrical incident.

There is very little measurable drop-off in lamp output after 1000 hours of use, which assures constant, stable output and colour consistency.

The New ArenaVision will still be as bright as the day they were installed.







Dust proof, rain proof

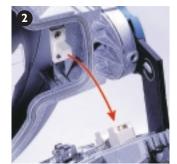
lower installation and maintenance cost

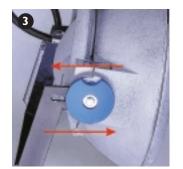
The increased light output and optical efficiency of the New ArenaVision provide the same uniform brilliance as before (more than conventional floodlights), but with fewer installed floodlights. In any stadium, this would add up to tidy installation savings.

On-site handling is simpler, quicker and cheaper. The compact, lightweight cast-aluminium housing is easy to carry, connect and aim. A hinged back that swings open vastly simplifies re-lamping; no tools are required. Lamps are effortlessly fixed by two snap-in clips. No insertion force on the lamp is necessary. Tight tolerances ensure that no mistakes are possible.

An automatic memory for the original aiming position (optional) is available to assure trouble-free re-lamping. The same exclusive engineering principles apply to models 401 and 403.













- 1 Easy, tool-free access to lamp compartment.
- 2 Precise electrical connection for MHD lamp in model 403 is completed by closing the housing.
- **3** Forward and backward movement of floodlight (MVF403 only).
- 4 Rotation inclines floodlight up or down.
- 5 Horizontal shifting with 16mm bolt.
- 6 Connection box for easy electrical installation between floodlight and gear.

ARENA VISION FLOODLIGHT LUMINAIRES

10

improved light control

ArenaVision MVF403

ArenaVision MVF403 offers a choice of seven different optical systems all made of chemically anodized and brightened high purity aluminum (99.8%). These seven optics fit within the same housing and provide a program of well-defined beams, each with a sharp cut-off characteristic, which allows the luminaire to be used at various mounting heights.

The seven optics are represented below by their projected beam patterns and corresponding light intensities.

| 1800/2000W Downlighting | | | | | | | | | |
|-------------------------|------------------------------|---|----|---|----|--|----|--|----|
| | I _{max} (cd/klm) | 1/2-I _{max} vertical (degrees) | | 1/2-I _{max} horizontal (degrees) | | 1/10-I _{max} vertical (degrees) | | 1/10-l _{max} horizontal (degrees) | |
| CAT A1 | 28075 | -3 | 3 | -4 | 4 | -7 | 4 | -10 | 10 |
| CAT A2 | 12895 | -5 | 4 | -8 | 8 | -9 | 7 | -13 | 13 |
| CAT A3 | 10442 | -5 | 6 | -8 | 8 | -11 | 9 | -15 | 15 |
| CAT A4 | 6570 | -6 | 6 | -12 | 12 | -12 | 9 | -20 | 20 |
| CAT A5 | 4190 | -8 | 8 | -15 | 15 | -16 | 11 | -25 | 25 |
| CAT A6 | 2288 | -10 | 9 | -22 | 22 | -23 | 14 | -39 | 39 |
| CAT A7 | 1509 | -19 | 13 | -22 | 22 | -43 | 23 | -40 | 40 |

ArenaVision MVF401

The MVF401 range consists of a medium and wide beam, both made of chemically anodized and brightened high purity aluminum (99.8%).

These optical systems are also provided with a built-in aluminum reflecting skirt. This, together with the compact lamp in transversal position helps maximize the efficiency and reduce glare and stray light to an absolute minimum. Its beam characteristics make the luminaire ideal for line arrangements alongside a sports playing area. Typical mounting heights vary between 10 and 20 meters.

The optics are represented below by their projected beam patterns and corresponding light intensities.

| 1000W Downlighting | | | | | | | | |
|--------------------|------------------------------|---|---|--|--|--|--|--|
| | I _{max} (cd/klm) | 1/2-I _{max} vertical (degrees) | 1/2-l _{max} horizontal (degrees) | | | | | |
| Medium | 1255 | -16 13 | -28 28 | | | | | |
| Wide | 738 | -27 18 | -39 39 | | | | | |

The result; studio-quality control of key, fill and backlighting, optimum broadcast conditions and increased visual comfort for players and spectators.



MVF401



MVF403

Product details

Application

- MVF403: major outdoor sports facilities.
- MVF401: medium to large sports halls and indoor stadiums.

The oval floodlight

- Material: non-corrosive high-pressure die-cast aluminium.
- Available in two parts: reflector housing and rear housing.
- The reflector housing comes with a mounting bracket onto which a separate connection box is attached.
- The rear housing is permanently attached to the reflector housing by a hinge and two stainless steel clips.

 Can be opened whenever necessary for relamping and/or servicing.

Reflector

- Material: 99.8% high purity aluminum to maximize light output
- MVF401: medium and wide beam optical system.
- MVF403: equipped with seven different optical systems, from very narrow (CAT A1) to very wide (CAT 7)
- Equipped with built-in aluminum reflecting skirt, which contributes to the efficiency and reduces glare and stray light to an absolute minimum.

Front glass and wire mesh

- Downlighting version: comes with chemically toughened front glass (1.6mm thick), which is fixed inside the high-pressure die-cast aluminum frame. This frame is attached to the reflector housing with four stainless steel screws.
- Uplighting version come with 4mm thick ceramic glass.
- A silicon rubber gasket around the front glass guarantees perfect sealing between the reflector housing and the frame containing the front glass (IP65).
- Front glass covered by a stainless steel wire mesh, fixed in between the edge of the frame and the silicone gasket, preventing large pieces of glass from falling down in case of breakage.

Connection box

- \bullet A separate aluminum connection box is permanently fixed to the mounting bracket.
- Contains a five-or-six-way terminal block for cable connection.
- Pre-connected lamp wires enter the floodlight via a PVDF hose.
- Also serves as a breathing device for the luminaire through the small holes at the bottom of box.

Rear opening access

- Access to the interior of the luminaire (e.g. for lamp replacement) is obtained by releasing the two stainless steel clips at the back of the luminaire. No tools are required.
- After releasing the clips, the rear housing can be hinged away 120 degrees from the reflector housing till it is automatically blocked. Mounting position of the floodlight remains unchanged.
 Both hands are now free for re-lamping and/or serving.

MVF401 MVF403 MVF403 MVF403 MVF403

| Ordering data | | | | | | | | |
|-----------------------------------|---------------|---------------------|--------------------------|--------------|-----------------|--|--|--|
| Product description | Lamp | Packing weight (kg) | Dimensions LxWxH (mm) | Packing unit | Ordering number | | | |
| 220-240V/50Hz | | | | | | | | |
| MVF401 1xMHN-LA 1000W MB | MHN-LA 1000W | 12.4 | 620x480x290 | 1 | 9105 002 69118 | | | |
| MVF401 1xMHN-LA 1000WWB | MHN-LA 1000VV | | | | 9105 002 69218 | | | |
| MVF403 1xMHN-SA 1800W CAT1 | | 15.8 | 640x580x340 | | 9104 018 33418 | | | |
| MVF403 1xMHN-SA 1800W CAT2 | | | | | 9104 018 33518 | | | |
| MVF403 1xMHN-SA 1800W CAT3 | | | | | 9104 018 33618 | | | |
| MVF403 1xMHN-SA 1800W CAT4 | MHN-SA 1800W | | | | 9104 018 33718 | | | |
| MVF403 1xMHN-SA 1800W CAT5 | | | | | 9104 018 33818 | | | |
| MVF403 1xMHN-SA 1800W CAT6 | | | | | 9104 018 33918 | | | |
| MVF403 1xMHN-SA 1800W CAT7 | | | | | 9104 018 34018 | | | |
| 380-415V/50Hz | | | | | | | | |
| MVF403 1xMHN-SA 2000W CAT1 | | 15.8 | 640x580x340 | 1 | 9104 018 33218 | | | |
| MVF403 1xMHN-SA 2000W CAT2 | | | | | 9104 018 33118 | | | |
| MVF403 1xMHN-SA 2000W CAT3 | | | | | 9104 018 33018 | | | |
| MVF403 1xMHN-SA 2000W CAT4 | | | | | 9104 018 32918 | | | |
| MVF403 1xMHN-SA 2000W CAT5 | MHN-SA 2000W | | | | 9104 018 32818 | | | |
| MVF403 1xMHN-SA 2000W CAT6 | | | | | 9104 018 32718 | | | |
| MVF403 1xMHN-SA 2000W CAT7 | | | | | 9104 018 32618 | | | |
| MVF403 1xMHN-SA 2000W CAT1 UP | | | | | 8241 069 29480 | | | |
| MVF403 1xMHN-SA 2000W CAT3 UP | | | | | 8241 069 29580 | | | |
| MVF403 1xMHN-SA 2000W CAT5 UP | | | | | 8241 069 44980 | | | |
| Gear Tray | | | | | | | | |
| ZVF320 MHD1800 230-240 HPWV SP LD | MHN-SA 1800W | 19 | 415×270×160 | 1 | 9104 018 60918 | | | |
| ZVF320 MHD2000 380-415 WV SI | MHN-SA 2000W | 19.5 | 41382708100 | ' | 9104 018 46118 | | | |
| Gear Box | | | | | | | | |
| ZVF350/1000S (220V/50Hz) | MHN-LA 1000W | 17 | 530×300×250 | | 8241 100 10110 | | | |
| ZVF350/1800M (220V/50Hz) | MHN-SA 1800W | 20 | | 1 | 8241 100 10130 | | | |
| ZVF350/2000M (380V/50Hz) | MHN-SA 2000W | 20.5 | | | 9104 019 66780 | | | |

Notes: Standard products are for 220V 50Hz and 380V/50Hz systems. Other voltage and frequency systems are available upon request.

Specifications subject to modific





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